

TAS 3460-14

T.H. 212

JCT. T.H. 694 TO ST. CROIX RIVER

S.P. 8214-47

APRIL 1969

OFFICE OF  
TRANSPORTATION PLANNING

MINNESOTA HIGHWAY DEPARTMENT



DEPARTMENT HIGHWAY

## Office Memorandum

TO : Paul G. Velz  
Road Design Engineer

DATE: May 1, 1969

FROM : Johan Nygaard, Director  
Transportation Planning

SUBJECT: T.H. 212, Jct. T.H. 694 to St. Croix River (E. State Line)  
S.P. 8214-47  
TAS 3460-14

The Traffic Analysis Section transmits this report in response to K. McRae's November 6, 1968 request for the 1985 ADT, DHV and HCADT for the project location shown on the map on page 2.

The estimated 1985 ADT volumes are shown on the map on page 3.

For each segment numbered on the map on page 3, the following data are tabulated on pages 4-9:

- (a) Total ADT
- (b) Vehicle Type Distribution
- (c) Total HCADT

Segment 6, with a 1985 ADT of 32,800, has the highest 1985 ADT on the project section of T.H. 212. The 1968 ADT on the parallel section of existing TH 212 is 9400.

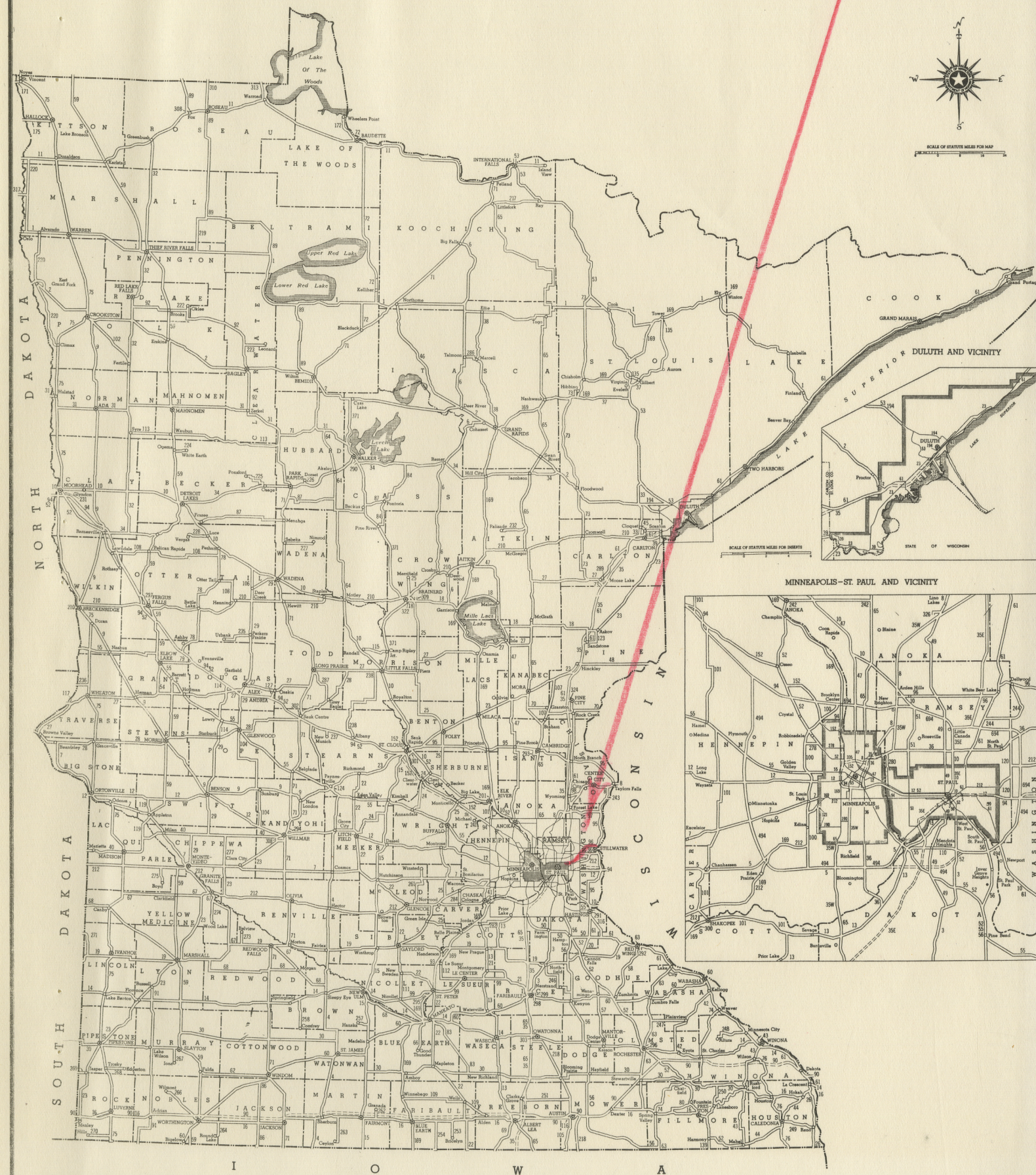
The basic data, method and assumptions used to prepare this report are presented on page 10.

*Johan Nygaard*  
Johan Nygaard, Director  
Transportation Planning

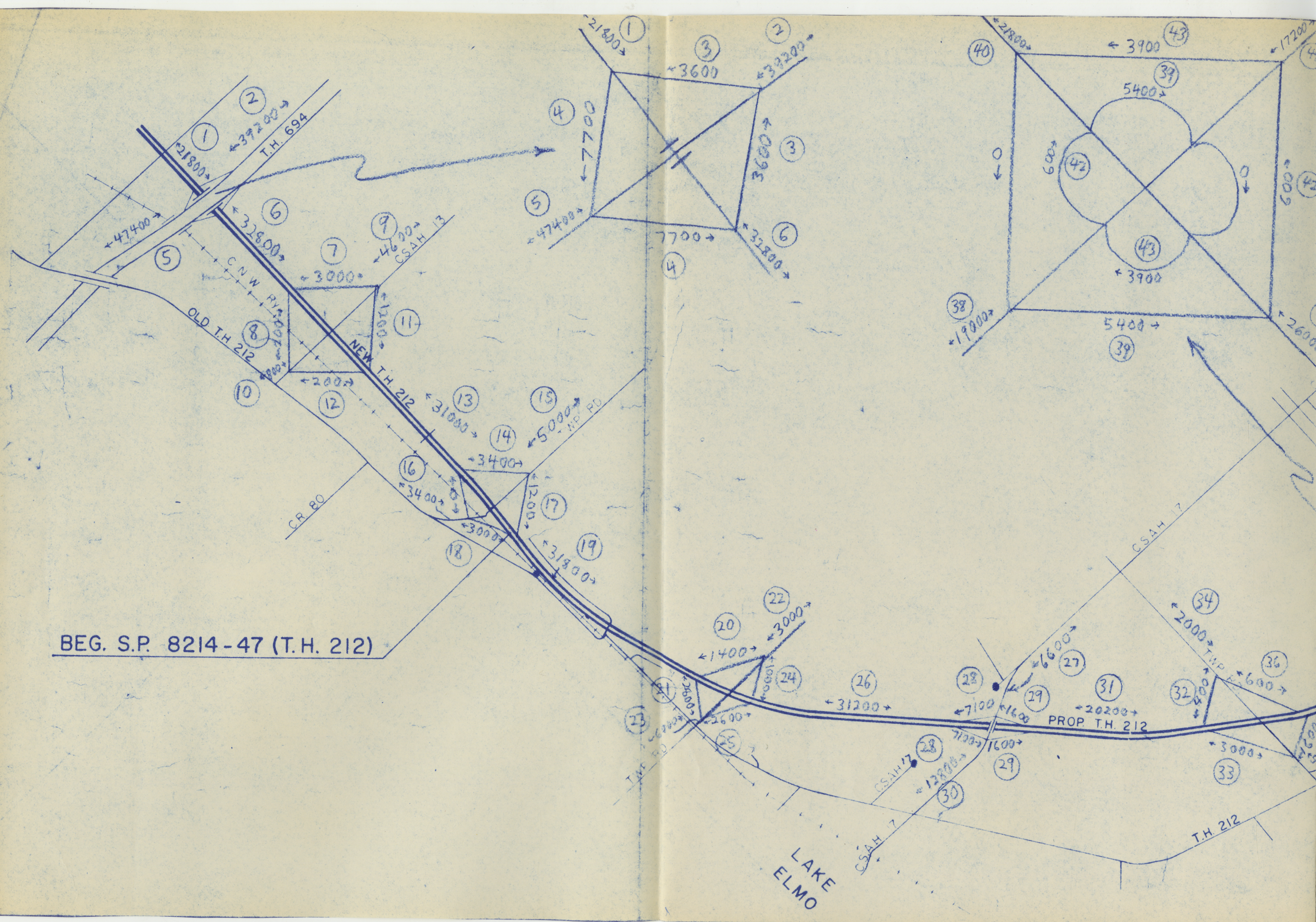
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STATE OF MINNESOTA  
DEPARTMENT OF HIGHWAYS  
WORK MAP

Project Location  
SP 8214-47



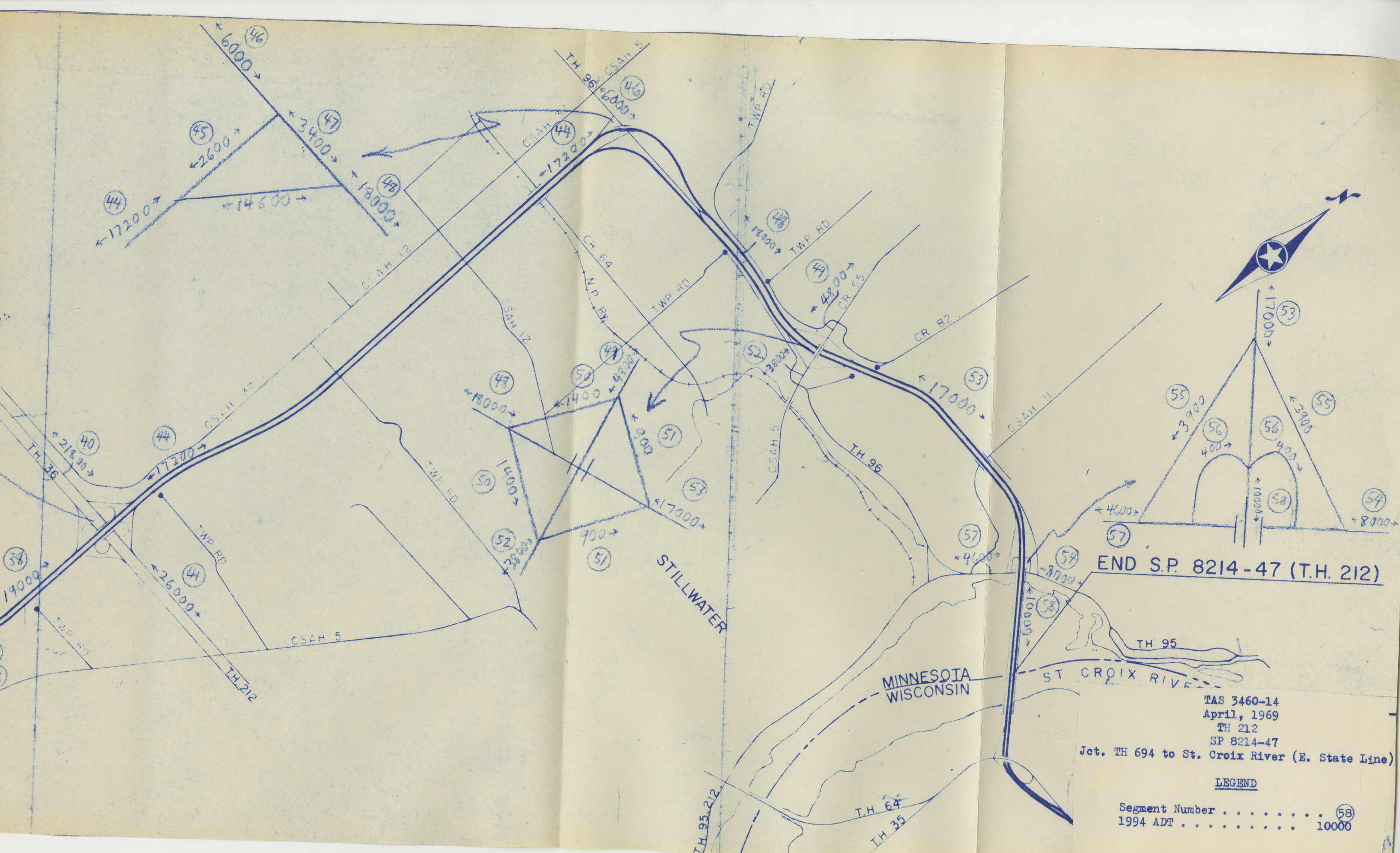




BEG. S.P. 8214 - 47 (T.H. 212)

LAKE  
ELMO





END S.P. 8214-47 (T.H. 212)

TAS 3460-14  
April, 1969  
TH 212  
SP 8214-47  
Jct. TH 694 to St. Croix River (E. State Line)

LEGEND  
Segment Number . . . . . (58)  
1994 ADT . . . . . 10000



## TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 1 OF 6

FOR

T.H. 212 S.P. 8214-47 LENGTH - MILES  
 COUNTY Washington LOCATION Jct. TH 694 to St. Croix River  
(E. State Line)

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS  
 DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	20560	37150	3424	7278	44858	30978	2861	191	4373	751	1143
1	601	698	87	230	984	910	88	6	142	31	35
2	131	507	26	73	601	227	17	1	25	3	7
3	101	95	3	8	105	112	4	-	8	2	2
4	49	217	25	27	221	100	4	-	8	2	2
5	100	328	4	8	336	111	1	-	2	-	1
6	258	205	31	76	295	362	25	2	42	11	10
TOTAL ADT	21800	39200	3600	7700	47400	32800	3000	200	4600	800	1200
TOTAL H. COMM. ADT	1240	2050	176	422	2542	1822	139	9	227	49	57
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

## \* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS  
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
 2 = SINGLE UNIT-3 AXLE TRUCKS  
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES  
 4 = TRACTOR-TRUCK OR SEMI-TRAILER -- 4 AXLES  
 5 = TRACTOR-TRUCK OR SEMI-TRAILER -- 5 AXLES  
 6 = BUSES AND TRUCKS WITH TRAILERS

## TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 2 OF 6

FOR

T.H. 212 S.P. 8214-47 LENGTH - MILES  
 COUNTY Washington LOCATION Jct. TH 694 to St. Croix River  
(E. State Line)

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS  
 DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	191	29260	3223	4745	3262	1138	2878	30053	1336	2675	2865
1	6	857	107	155	92	37	81	868	29	59	63
2	1	217	9	13	9	3	8	219	6	11	12
3	-	110	7	11	5	3	4	110	4	8	9
4	-	98	9	12	5	3	5	97	6	11	12
5	-	111	2	3	2	1	2	112	6	11	12
6	2	347	43	61	25	15	22	341	13	25	27
TOTAL ADT	200	31000	3400	5000	3400	1200	3000	31800	1400	2800	3000
TOTAL H. COMM. ADT	9	1740	177	255	138	62	122	1747	64	125	135
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

## \* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS  
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
 2 = SINGLE UNIT-3 AXLE TRUCKS  
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES  
 4 = TRACTOR-TRUCK OR SEMI-TRAILER -- 4 AXLES  
 5 = TRACTOR-TRUCK OR SEMI-TRAILER -- 5 AXLES  
 6 = BUSES AND TRUCKS WITH TRAILERS



## TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 3 OF 6

FOR

T.H. 212 S.P. 8214-47 LENGTH - MILESCOUNTY Washington LOCATION Jct. TH 694 to St. CroixRiver (E. State Line)

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER										
	23	24	25	26	27	28	29	30	31	32	33
0	5734	955	2485	29482	6184	6652	1497	11994	19172	374	2793
1	127	21	55	856	197	213	48	383	526	13	96
2	23	4	10	216	40	42	10	76	152	2	19
3	17	3	7	108	26	29	7	52	64	2	16
4	23	4	10	94	33	36	8	65	38	2	18
5	23	4	10	109	40	42	10	76	45	2	19
6	53	9	23	335	80	86	20	154	203	5	39
TOTAL ADT	6000	1000	2600	31200	6600	7100	1600	12800	20200	400	3000
TOTAL H. COMM. ADT	266	45	115	1718	416	448	103	806	1028	26	207
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

## \* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS  
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
 2 = SINGLE UNIT-3 AXLE TRUCKS  
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES  
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES  
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES  
 6 = BUSES AND TRUCKS WITH TRAILERS

## TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 4 OF 6

FOR

T.H. 212 S.P. 8214-47 LENGTH - MILESCOUNTY Washington LOCATION Jct. TH 694 to St. Croix River(E. State Line)

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH 44 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER										
	34	35	36	37	38	39	40	41	42	43	44
0	1864	5221	558	1496	18059	5150	20722	24730	572	3718	16339
1	64	180	19	52	488	129	473	573	14	93	444
2	12	33	4	8	143	43	130	164	5	31	129
3	10	28	3	7	56	11	28	36	1	8	52
4	12	32	4	8	30	14	88	96	2	12	30
5	12	33	4	8	36	15	289	301	2	11	32
6	26	73	8	21	188	38	70	100	4	27	174
TOTAL ADT	2000	5600	600	1600	19000	5400	21800	26000	600	3900	17200
TOTAL H. COMM. ADT	136	379	42	104	941	250	1078	1270	28	182	861
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

## \* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS  
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
 2 = SINGLE UNIT-3 AXLE TRUCKS  
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES  
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES  
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES  
 6 = BUSES AND TRUCKS WITH TRAILERS



## TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 5 OF 6

FOR

T.H. 212 S.P. 8214-47 LENGTH - MILES  
 COUNTY Washington LOCATION Jct. TH 694 to St. Croix  
(E. State Line)

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 45 THROUGH 55 AS  
 DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER										
	45	46	47	48	49	50	51	52	53	54	55
0	2484	5730	3246	17101	4620	1347	867	3660	16141	7581	3677
1	54	126	72	462	84	25	16	66	444	253	109
2	10	24	14	133	17	5	3	13	129	63	38
3	8	18	10	54	14	4	2	10	50	16	12
4	10	24	14	34	13	4	3	11	32	15	6
5	10	24	14	36	17	5	3	13	32	23	6
6	24	54	30	180	35	10	6	27	172	49	52
TOTAL ADT	2600	6000	3400	18000	4800	1400	900	3800	17000	8000	3900
TOTAL H. COMM. ADT	116	270	154	899	180	53	33	140	859	419	223
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

## \* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS  
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
 2 = SINGLE UNIT-3 AXLE TRUCKS  
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES  
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES  
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES  
 6 = BUSES AND TRUCKS WITH TRAILERS

## TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 6 OF 6

FOR

T.H. 212 S.P. 8214-47 LENGTH - MILES  
 COUNTY Washington LOCATION Jct. TH 694 to St. Croix River  
(E. State Line)

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 56 THROUGH 58 AS  
 DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER									
	56	57	58							
0	377	4375	9541							
1	11	158	248							
2	4	30	61							
3	1	6	28							
4	1	9	22							
5	1	18	22							
6	5	4	78							
TOTAL ADT	400	4600	10000							
TOTAL H. COMM. ADT	23	225	459							
TOTAL DHV										
DIRECTIONAL DISTRIBUTION										

## \* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS  
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS  
 2 = SINGLE UNIT-3 AXLE TRUCKS  
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES  
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES  
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES  
 6 = BUSES AND TRUCKS WITH TRAILERS



Basic Data, Method, and Assumptions

The 1985 ADT, DHV, and its directional distribution is presented in TAS 639-14 transmitted on March 31, 1969. The 1985 total heavy commercial ADT agrees with the System 14 Heavy Truck ADT Study.

Based on the projections of classification counts in the study area, the 1985 System 14 HCADT was distributed by vehicle type to produce the tabular data presented in pages 4 through 9 of this report.

As stated in the first paragraph of the March 31, 1969 memo for TAS 693-14, the 1994 volumes may be obtained by expanding the reported 1985 volumes by approximately 30 percent.